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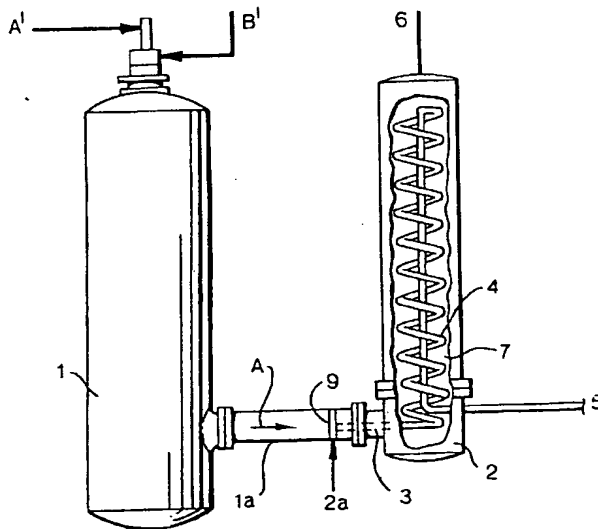
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(54) Title: APPARATUS AND PROCESS FOR COOLING HOT GAS



(57) Abstract: Process to cool hot gas by passing the hot gas through a tube having a main tubular part and an upstream tubular part, wherein (i) the exterior of main tubular part is cooled by an evaporating liquid cooling medium flowing freely around said tube, (ii) the upstream tubular part is cooled by passing fresh liquid cooling medium and a defined part of the liquid cooling medium of activity (i) along the exterior of the upstream end of the tube and (iii) wherein the mixture of fresh cooling medium and the defined part of the liquid medium after being used to cool the upstream tubular part is used in activity (i) as cooling medium.

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